

ABSTRACT

A method is disclosed of forming a bonding pad that is immune to IMD cracking. A partially processed semiconductor wafer is provided having all metal levels completed. A blanket dielectric layer is formed over the uppermost metal level. Patterning and etching said dielectric layer horizontal and vertical arrays of trenches are formed passing through the dielectric layer and separating the dielectric layer into cells. The trenches are filled with a conducting material and, after performing CMP, bonding metal patterns are deposited. Wires are bonded onto said bonding metal patterns, after which a passivation layer is formed.